

SunWater Limited
Level 10, 179 Turbot Street
PO Box 15536 City East
Brisbane Queensland 4002
www.sunwater.com.au
ACN 131 034 985



2016 Annual Performance Report

Mareeba Distribution

October 2016

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Introduction

A recommendation from the 2013-17 review of SunWater's irrigation pricing was for SunWater to produce annual Network Service Plans (NSPs) to help keep customers informed throughout the pricing period. SunWater has decided to also produce annual Performance Reports such as this report to show how SunWater has performed against the QCA targets for the year just completed.

SunWater revised the format for 2015 to incorporate customer feedback and to provide more detail on items such as insurance. The new format includes a summary of the annual expenditure and annual revenue to provide a snapshot of scheme performance across the year.

In line with customer feedback 2017 forecast data is also provided and compared with QCA targets.

SunWater values customer feedback and will publish all submissions and SunWater's responses on our website. Customers can provide their feedback via email or post at the following addresses:

Email: nspfeedback@sunwater.com.au

Post: NSP Feedback
PO Box 15536 City East
Brisbane QLD 4002

Table 1 – Operating Revenue Less Spend

Mareeba IS		2013	2014	2015	2016	2017
	Table reference	Actual \$000	Actual \$000	Actual \$000	Actual \$000	Budget \$000
Revenue	3	5,225	6,802	6,197	6,727	5,893
Less - Routine Expenditure	4 & 7	4,286	4,567	5,123	4,953	5,017
Less - Non-Routine Expenditure						
• Annuity Funded	5, 6 & 7	471	1,091	544	1,129	1,144
• Non Annuity Funded	5	4	9	7	28	-
Surplus (Deficit)		465	1,135	522	617	(268)

Table 1 provides an indication of the annual cash performance of the scheme. Note that the table reports total non-routine spend and does not take into account the renewals annuity. Further information is provided below in each section of this report.

Mareeba IS

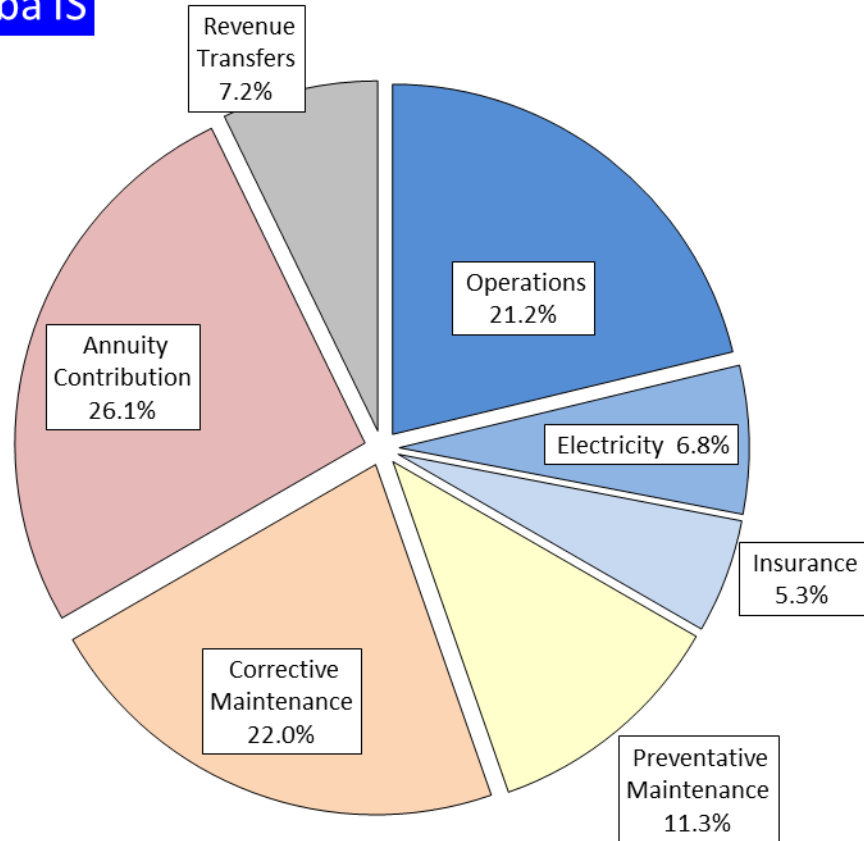


Figure 1: Breakdown of Irrigation Scheme Costs – 2016 Actual

Figure 1 shows a high level summary of scheme costs and provides an indication of where revenue from irrigation water charges is applied. The item “Annuity Contribution” refers to the component of irrigation water charges that is applied toward the renewals annuity each year. The item “Revenue Transfers” refers to the contribution towards the cost of the bulk water scheme.

Water Usage

Table 2 – 2016 Water Usage

Customer Segment	No. of Customers	Water Entitlements (ML)	Available Water (ML)	Available Water (%)	Water Deliveries (ML)	Water Deliveries (%) Against Entitlement	Water Deliveries (%) Against Available Water
1. Industrial		1,033	1,220	118	884	86	72
2. Irrigation		144,746	153,361	106	121,585	84	79
3. Urban		1,153	1,537	133	535	46	35
4. Other		0	0	0	0	0	0
5. SunWater		45,000	45,000	100	31,439	70	70
Service Contract Total	1,089	191,932	201,118	105	154,442	80	77

QCA Assumed Total Water Usage 67.1%

Total water use is above the QCA target.

Table 3 – Revenue

Mareeba IS		2013	2014	2015	2016	2017
		Actual \$000	Actual \$000	Actual \$000	Actual \$000	Budget \$000
Irrigation		6,314	6,610	6,126	6,750	6,073
Industrial		196	171	213	204	138
Urban		185	191	195	198	139
Irrigation CSO		495	332	142	82	66
Revenue Transfers		(1,989)	(532)	(512)	(537)	(533)
Drainage		-	-	-	-	-
Other		23	31	33	30	10
Insurance Proceeds - Flood		-	-	-	-	-
Revenue Total		5,225	6,802	6,197	6,727	5,893

* Following feedback from customers, SunWater has unbundled bulk water charges from distribution system charges. This means that revenue figures in past performance reports and NSPs will not match those above.

Revenue Transfers represent the cost of bulk water supplies delivered through the distribution system(s). The revenue accrues to the distribution system before it is transferred to the Bulk Water Supply Scheme as a contribution to the cost of the bulk water service. The QCA established the transfer cost for irrigation supplies at the cost reflective bulk water tariff.

Routine Expenditure

Table 4 – Routine Operating Expenditure

Mareeba IS	2013			2014			2015			2016			2017			% of target
	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Target \$000	Variance \$000	
Operations	1,830	1,571	(259)	1,716	1,617	(99)	1,580	1,653	73	1,576	1,663	87	1,811	1,650	(161)	110
Electricity	424	337	(87)	412	360	(51)	477	386	(91)	508	417	(91)	545	446	(99)	122
Insurance	406	287	(119)	564	292	(272)	434	297	(137)	391	302	(90)	471	307	(164)	154
Operations Total	2,660	2,195	(465)	2,692	2,269	(423)	2,490	2,335	(155)	2,475	2,382	(94)	2,827	2,403	(424)	118
Preventative Maintenance	489	498	9	679	513	(166)	1,030	525	(505)	841	531	(310)	674	529	(144)	127
Corrective Maintenance	1,136	1,373	237	1,197	1,442	245	1,603	1,505	(98)	1,636	1,553	(83)	1,517	1,579	63	96
Routine Total	4,286	4,067	(219)	4,567	4,224	(344)	5,123	4,366	(757)	4,953	4,465	(487)	5,017	4,511	(506)	111

Operations

Operation activities include the day-to-day costs of the administration and management of the scheme, customer liaison, water delivery and meeting compliance obligations. Specific activities include the direct and non-direct cost of¹:

- Scheduling and delivering water including processing water orders, releasing water, operating pump stations, regulation and monitoring of channel flows and monitoring of customer deliveries;
- Emergency responses for channel overflows and other emergency events;
- Meter reading;
- Administration of water accounts, billing, and receipting payments;
- Customer management, including enquiries, complaints and maintaining the customer service help desk;
- Scheme management, including licences and permits, rates, land management, planning and reporting;
- Insurance;
- Monitoring the security of infrastructure and unauthorised access and trespass; and
- Managing public relations associated with the scheme.

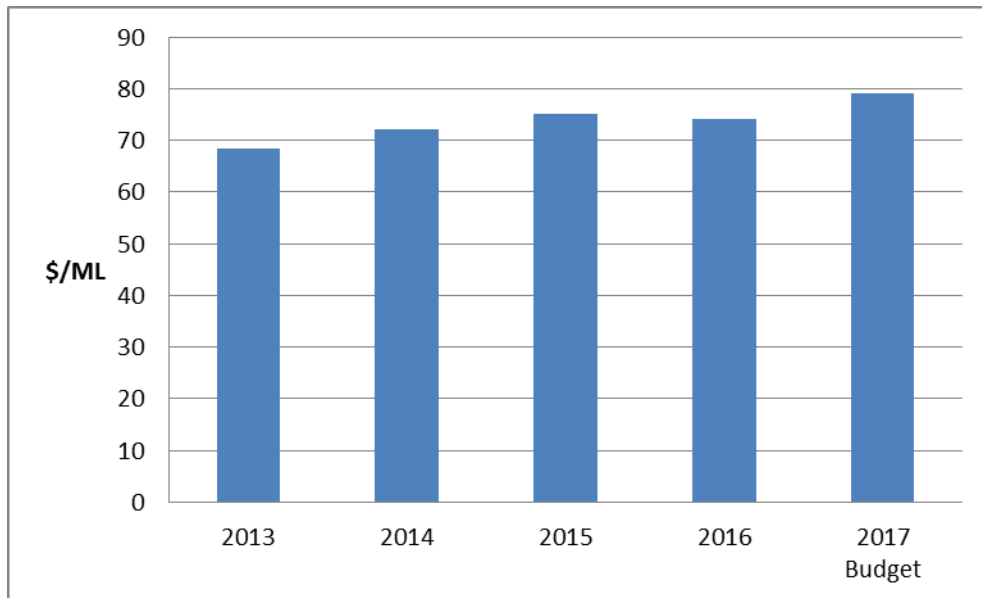
¹ Activities listed will not apply to all service contracts.

- Property Management
- Asset management

The operations expenditure was above the QCA target.

- Insurance costs were higher than target; and
- Electricity costs were above the QCA target.

The chart below tracks pumping cost per ML delivered across the price path based on actual and forecast data. The chart reflects the escalation of electricity prices, tariff changes and variation in volumes lifted by high cost and low cost pump stations.



Preventive Maintenance

Preventive maintenance is maintaining the ongoing operational performance and service capacity of physical assets to designed standard. Preventive maintenance is cyclical in nature with a typical interval of 12 months or less. Preventive maintenance activities are based on the updated work instructions developed for operating the scheme and include an estimate of the resources required to implement that scope of work. Preventive maintenance includes¹:

- Condition monitoring – the inspection, testing or measurement of physical assets to report and record its condition and performance for determination of maintenance requirements. Condition monitoring is carried out on electrical, mechanical and civil assets including pump stations (pumps, electrical motors, valves, switchboards and associated equipment), channels (regulator gates, civil works, signs, structures, etc.), drains (civil works, structures etc.), pipelines (valves, air valves, scours easements etc.) and other infrastructure;
- Pre-wet season inspections of cross drains and other wet season critical infrastructure.
- Servicing – planned maintenance activities normally expected to be carried out routinely on physical assets including valves, cranes, sump pumps and associated equipment; and
- Weed control – which includes the following activities:
 - Slashing channels and drains;
 - Mechanical weed control of trees
 - Mechanical aquatic weed control such as scraping and chain dragging
 - Copper Sulphate treatment; and
 - Spraying and other activities to control operational and noxious weeds within channel and drainage reserves and balancing storages.

Preventive maintenance was above the QCA's target.

Corrective Maintenance

Corrective maintenance includes activities to correct unexpected failures or to return an asset to an acceptable level of performance or condition. While these are difficult to forecast with accuracy, history has shown that such events can be expected and need to be factored into expenditure forecasts. Forecasts include provision for labour, materials and plant hire.

The corrective maintenance forecast does not include any costs of damage arising from major unexpected events, such as floods. These costs are categorised as non-routine corrective maintenance which is discussed in the following section.

There are two types of corrective maintenance – scheduled and emergency²:

- Scheduled corrective maintenance is maintenance that can be planned and scheduled, and includes:
 - Channels
 - De-silting channels and catch drains;

² Activities listed will not apply to all service contracts.

- Erosion control and repair of rock protection works;
 - Repair fencing;
 - Repair concrete structures; and
 - Repair regulator gates, control valves, etc.
- Drains
 - De-silting drains;
 - Erosion control and repair of rock protection works;
 - Repair fencing; and
 - Repair concrete structures.
- Pipelines
 - Pipe breaks;
 - Repair air valves, scour valves, etc.;
 - Erosion control and repair of rock protection works; and
 - Repair concrete structures.
- Scheme Roads
 - Repair pot holes;
 - Grade roads; and
 - Repair, replace and paint guide posts and signs.
- Pump stations
 - Repair pumps and motors;
 - De-silt intake structures;
 - Repair concrete structure; and
 - Repair control building.
- Storages (balancing storages and reservoirs)
 - Repair control gates and valves;
 - Repair walls, embankments and spillways; and
 - Repair concrete structures.
- Meters
 - Repair bulk water meters; and
 - Repair customer meters.
- Emergency corrective maintenance is maintenance that has to be carried out immediately to restore normal operation or supply to customers or to meet regulatory obligations (e.g.

rectify a safety hazard) and includes:

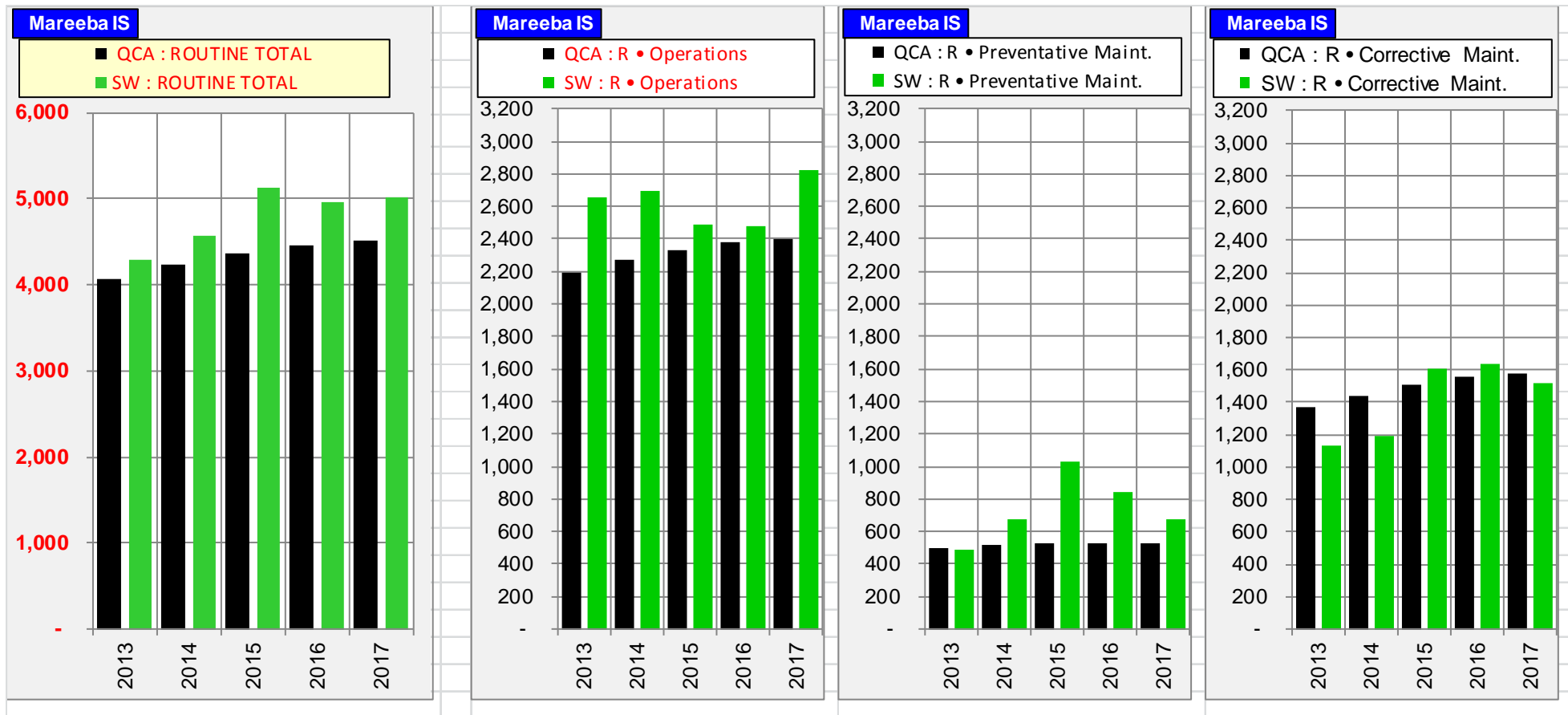
- Repair or correction of pump station faults;
- Repair or correction of channel faults;
- Repair SCADA control system and gate failures;
- Repair or correction of pipeline faults; and
- Response to theft or vandalism associated with scheme assets.

Corrective maintenance was above the QCA's target.

Routine Cost – Summary and Charts

The information in Table 4 above is re-presented in the charts below to graphically show SunWater’s performance against the QCA targets. In summary the key challenges in managing routine cost lie with reigning in input cost like electricity, Acrolein and insurance. Emergency Event Management costs are also an impact on the scheme, but have not been distributed at the scheme level.

Figure 2: Routine Expenditure by Activity compared to QCA Target (\$'000)



Non-Routine Expenditure

SunWater has developed a whole of life strategy around the replacement and maintenance of its asset portfolio which is based on the concept of optimised life. The key drivers in this approach are the risk and condition of each asset. The current condition of an asset drives an estimate of the future work required to ensure an asset continues to be able to provide the required level of service into the future. SunWater maintains a program of asset inspections and condition assessments which continually updates our knowledge of asset condition. This information feeds into the annual review of the renewals program, the most recent of which was completed in February 2015; items requiring immediate maintenance or replacement are included in the budget for the following year.

While the immediate program for the next year's budget is well defined; the further into the planning timeline, the more uncertain the estimates become. Consequently, the program of works is not a specific forecast of when individual projects are expected to be executed but rather it is portfolio level estimate of works based on the best-available risk and condition information for the service contract as a whole. This information feeds into calculation of the annuity to fund renewals. Having an annuity funding arrangement acknowledges that a long-term view of renewals spend is required to ensure adequate funding and to address issues such as inter-generational equity.

The QCA targets were set against an estimated program of works from the 2010-11 year. While this was the best estimate of expected work at the time, there has been significant project churn in the three years since this estimate was made. This can mean that, in some cases, the QCA's funding allowance for renewals work does not cover the total expenditure required to maintain asset condition to the required standard. In addition, there have been unexpected events, such as floods, that were not allowed for in the QCA's annuity funding allowance.

SunWater is focusing effort on reviewing renewals profiles so that assets are maintained to the required standard with the minimum spend. This review extends to considering the key asset replacement assumptions so that the profile better reflects likely spend each year and moves away from assuming assets are replaced at end of standard life, based on their replacement costs. This is expected to reduce the renewals profile going forward and will be discussed in more detail with customers prior to the 2017 financial year.

Table 5 – Non-Routine Expenditure

Mareeba IS	2013			2014			2015			2016			2017			
	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Target \$000	Variance \$000	% of target
Annuity Funded																
Operations	-	59	59	120	74	(46)	151	-	(151)	68	-	(68)	58	-	(58)	-
Preventative Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corrective Maintenance (Flood)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R&E	471	1,141	670	971	1,239	268	393	1,537	1,144	1,060	1,813	752	1,086	1,546	461	70
Non-routine Total	471	1,200	729	1,091	1,313	221	544	1,537	993	1,129	1,813	684	1,144	1,546	402	74
Non Annuity Funded	4			9			7			28			-			

R&E – Annuity Funded

The annuity funded R&E Projects undertaken included:

PROJECT	SPEND 2016
14MDA13 Implement Findings: Strategic Plan for MDWSS I&D SCADA - Stage 2	676527
15MDA42 Install dissipation screens WBMC_B (Procure 2015)	81032
16MDA12 Investigate & Replace Baulk Gates in Channel Structure at DC29 on West Barron Main Channel	65381
15MDA43 15MDA43 Install Wforge Covers on Siphons	57108
16MDA08 Design and Install Safety Screen CR02 - South Walsh Main Channel	44218
13MDA04 Investigate & Reinstate Outlet Works - Collins Weir Mareeba	29917
16MDA04 16MDA04 Install 3 Walkways & Handrails - Atherton/Mareeba/South Walsh Systems	26707
16MDA16 Replace Failed Meter - Arriga Distribution WB06A/1	18932
16MDA02 Install Fences & Signage - Leafgold, Bruce & Solanum Weirs	18742
15MDA44 Replace failed signs MDWSS	15477
16MDA19 Options Analysis - Protective Coating Refurbishment Gorge Ck Siphon	7300
16MDA06 Install Air Vent - South Walsh MC @ OVF12	6907
16MDA05 Replace SCADA PC - Mareeba Office (Costin Street)	6258
16MDA15 Replace Access Bridges (Design 2016 FY) Springs & Cherry Creek	3923
15MDA21 Replace electrical switchboard Bibohra PSTN	1255
15MDA09 Replace Electrical Pole - Paddys Green PSTNB	436
15MDA07 Install Screen at Siphon Entry - East Barron MC Road Culvert 17231.10-17267.99M - Safety risk	85

Corrective Maintenance

There was no expenditure categorised as “Corrective Maintenance”.

Other

The “Annuity-Funded Other” Projects included:

PROJECT	SPEND 2016
14MDA33 Copper sulphate research project	68417

- Copper sulphate research project: \$68k was spent in 2016 to complete trials and testing to demonstrate a structured and quantified approach to copper sulphate use. The intention is to minimise copper residue in water courses whilst killing algae in the channel system. This is an ongoing project with the objective to obtain a use permit with the APVMA. An extension has been approved by the APVMA until March 2017. Environmental and efficacy (effectiveness) trials are complete unless further requested by the APVMA. The formal application has been sent to APVMA. Ongoing dosing using low dose rates and early detection and intervention data collection ongoing,. Final APVMA assessment response target was May-June 2016 but response has yet to be received. Possible further data may be required pending the post-evaluation response.

R&E – Non Annuity

The Non-annuity funded R&E Projects included:

PROJECT	SPEND 2016
15MDA45 Upgrade Meter Arrangement at 194.9m on WB02	4773
16MDA07 Install New Meter- East Barron Lateral 4 (3245m)	3051
16MDA10 Install Metered Offtake - Walsh Bluff MC 1185 (L2 on SP196700)	2961
15MDA29 Upgrade offtake R05888 to 150mm diameter - MCK MDWSS (Customer Funded)	2113
16MDA27 Upgrade offtake to EM meter 803	1975
16MDA20 Install New Metered Offtake - West Barron MC 1187 (L5 on SP222278)	1931
16MDA26 Install PRV & Air Valve	1823
16MDA01 Replace & Relocate Meter with 150mm Emag to ~200m Upstream	1714
15MDA31 Install new customer offtake MO1183	1603
15MDA33 Install new offtake 4202m NW1	1572
16MDA25 Install PRV, AV and modify delivery	1495
15MDA30 Upgrade offtake to 200mm EM flowmeter	1246
16MDA23 Upgrade OT 978 to 300mm DIA & remove OT 1140 & 1141 Arriga MC	1219
15MDA37 Install new meters 1180, 1181 & 1182	719

Annuity Balance

The 2016 annuity balance is shown below.

Table 6 – Annuity Balance

Mareeba IS		2013	2014	2015	2016	2017
	Table reference	Actual \$000	Actual \$000	Actual \$000	Actual \$000	Budget \$000
Annuity						
Opening Balance		(587)	660	1,507	2,981	4,016
Net Spend	See below	(471)	(1,091)	(544)	(1,129)	(1,144)
Annuity Contribution		1,761	1,889	1,905	1,940	2,171
Interest		(44)	49	113	223	301
SunWater - Closing Balance		660	1,507	2,981	4,016	5,343
QCA - Closing Balance		983	1,633	2,124	2,410	3,215
Difference		(323)	(126)	858	1,606	2,129
Net Spend Analysis						
Spend	5 & 7	(471)	(1,091)	(544)	(1,129)	(1,144)
Insurance Proceeds Receipts						
• Prior Year		-	-	-	-	-
• Current Year		-	-	-	-	-
Net Spend		(471)	(1,091)	(544)	(1,129)	(1,144)

* 2017 figures are subject to change once actual spend is known.

Appendix – Total Expenditure by Expense Type

**Table 7 – Detailed Financial Summary
(Including Expenditure for Activity by Type)**

Mareeba IS	2013			2014			2015			2016			2017		
	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Actual \$000	QCA Target \$000	Variance \$000	SW Budget \$000	QCA Target \$000	Variance \$000
Revenue	5,225			6,802			6,197			6,727			5,893		
Routine Spend															
Operations															
Labour	666	557	(109)	601	575	(26)	539	594	55	551	613	62	631	632	1
Contractors	1	6	5	1	6	4	7	6	(1)	3	6	3	2	6	4
Materials	13	9	(4)	4	9	5	2	10	8	6	10	4	4	10	6
Electricity	424	337	(87)	412	360	(51)	477	386	(91)	508	417	(91)	545	446	(99)
Insurance	406	287	(119)	564	292	(272)	434	297	(137)	391	302	(90)	471	307	(164)
Other	40	72	32	98	73	(25)	103	75	(28)	67	76	9	132	77	(54)
Non-directs	1,110	927	(183)	1,012	953	(59)	929	969	40	948	959	10	1,042	924	(118)
	2,660	2,195	(465)	2,692	2,269	(423)	2,490	2,335	(155)	2,475	2,382	(94)	2,827	2,403	(424)
Preventative Maintenance															
Labour	204	149	(56)	229	153	(76)	312	158	(153)	258	163	(95)	202	169	(33)
Contractors	110	15	(94)	127	16	(111)	111	16	(94)	91	17	(74)	90	17	(73)
Materials	65	41	(23)	107	43	(64)	33	44	11	25	45	21	30	46	16
Other	1	56	55	3	58	55	48	60	12	28	62	34	21	63	42
Non-directs	110	236	127	212	243	31	527	247	(281)	439	243	(195)	331	234	(97)
	489	498	9	679	513	(166)	1,030	525	(505)	841	531	(310)	674	529	(144)
Corrective Maintenance															
Labour	266	354	87	305	376	71	411	399	(13)	424	423	(2)	419	448	29
Contractors	58	31	(27)	30	32	2	84	33	(51)	104	34	(70)	60	34	(26)
Materials	348	241	(107)	345	249	(96)	328	257	(72)	303	265	(38)	253	269	16
Other	4	176	172	6	182	176	65	187	122	69	193	124	92	197	104
Non-directs	459	572	113	512	604	92	715	630	(85)	735	638	(97)	692	631	(61)
	1,136	1,373	237	1,197	1,442	245	1,603	1,505	(98)	1,636	1,553	(83)	1,517	1,579	63
Routine - total	4,286	4,067	(219)	4,567	4,224	(344)	5,123	4,366	(757)	4,953	4,465	(487)	5,017	4,511	(506)
Non-Routine Spend															
Labour	57	128	71	158	146	(13)	158	182	24	196	229	33	137	287	150
Contractors	256	570	314	583	605	22	13	666	654	507	747	239	584	303	(281)
Materials	50	141	91	58	159	101	69	199	129	50	249	199	166	303	138
Other	2	77	75	11	87	77	31	108	78	15	136	120	1	165	165
Non-directs	105	284	179	282	316	34	273	381	108	359	452	92	257	488	231
Non-Routine - Total	471	1,200	729	1,091	1,313	221	544	1,537	993	1,129	1,813	684	1,144	1,546	402
Total Regulated Spend	4,757	5,266	510	5,659	5,536	(122)	5,667	5,903	236	6,081	6,278	197	6,161	6,058	(104)
Non Annuity Funded Spend	4			9			7			28			-		
Surplus (Deficit)	465			1,135			522			617			(268)		

Non-Direct Costs Explained

Non-direct costs reflect SunWater's methodology for distributing indirect costs, local overheads and corporate overheads to each service contract. Wherever practicable labour and other costs are booked direct to service contracts, however, where this is not possible the costs accumulate in either indirect or overhead accounting cost pools and are then distributed to service contracts.

Indirect cost pools capture costs such as billing and customer support, irrigation pricing regulation, asset management (including dam safety, asset systems, channels and drainage) that have not been directly charged. They also include flood room operations including the IGEM emergency management program, water planning, hydrographic services, environmental support costs and GM Operations. These indirect costs are shared between SunWater's lines of business ie Bulk Water, Irrigation Distribution Systems, Industrial Pipeline and Facilities Management where appropriate. For example service contracts without a dam are not apportioned dam safety costs.

Local overheads are spread across service contracts managed in each locality. They include regional accommodation costs, vehicle costs, local admin support and other local labour not directly booked to activities within service contracts.

Corporate overhead costs are more generic than indirect cost and local overheads and are spread across all service contracts based on direct labour. They include the cost of HR and payroll, ICT, communications, legal and property, finance, internal audit, plus the costs of the CEO, GM Corporate and the SunWater Board of Directors, where these costs are not directly charged to activities within service contracts.

SunWater's methodology was reviewed and accepted by the QCA during the 2012 pricing review.

Notes

All financial figures in this report are presented in nominal dollars.

Although the QCA set cost targets based on assumed inflation of 2.5%, most of the financial figures in the QCA's final report on SunWater's irrigation pricing were presented in real dollars (\$2011). To convert the QCA reported real dollars to nominal dollars, multiply by the below factors; these are based on the QCA's assumed inflation rate of 2.5% p.a. For comparison, the QCA conversion factors based on assumed inflation of 2.5% are compared with conversion factors based on actual inflation as measured by the Brisbane All Groups Consumer Price Index taken in March each year.

Table 8 – Conversion Factors for real \$2011 to Nominal Dollars

	2013	2014	2015	2016	2017
QCA Conversion Factor	1.051	1.077	1.104	1.131	1.16
Accumulative March Quarter CPI	1.0494	1.0714	1.105	1.1208	1.1397

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